

11-5019-007 May 25, 2018

Mr. David Genovese Baywater Properties 1019 Boston Post Road Darien, Connecticut 06820

Re: Traffic Impact Assessment
Residential Development
26 East Lane
Darien, Connecticut

Dear Mr. Genovese:

Tighe & Bond has conducted a traffic assessment to determine the potential impact of the proposed residential development at 26 East Lane. The development is expected to include two buildings with 12 efficiency apartment units with 12 parking spaces including 2 handicap parking spaces designed for adults with special needs and/or senior assisted living. The site will have a single driveway access at the south end of the property connecting to the cul-de-sac on East Lane. This assessment concludes that the development is not expected to generate a significant amount of traffic and, therefore, will not have a significant impact on the adjacent, local roadway network.

# **Existing Conditions**

The 26 East Lane site is located at the end of East Lane and is bordered by Interstate 95 to the west and residential properties to the north, west and south. The 0.91 acre site contains two existing buildings that were formerly occupied by a day care facility. The site has one curb cub on the northern end of East Lane that splits into two driveways for circulation through the site.

East Lane is classified as a public local road by the 2016 Darien Plan of Conservation and Development (POCD). East Lane intersect Old Kings Highway North opposite Fairmead Road (Private) approximately 150 feet east of the intersection with the Interstate 95 (I-95) northbound on-ramp and Parklands Drive. East Lane is approximately 250 feet in length, starting at Old Kings Highway North to the south and ending in a cul-de-sac to the north. The roadway has single travel lane in each direction, serving only property addresses #24 and 26, with no posted speed limit.

Old Kings Highway North is classified by the Darien POCD as a collector roadway. The roadway begins at the Norwalk Town Line to the east and continues west, past East Lane and the development site. The roadway then passes over I-95 where the roadway splits into two segments; one continuing west to the intersection with U.S. Route 1 (Post Road) and one continuing south to its terminus with Sedgewick Avenue and Mechanic Street at the north end of downtown Darien. In the vicinity of the site, Old Kings Highway North provides a single lane in each direction with a posted speed limit of 25 miles per hour. A review of available CTDOT triennial traffic count data shows that Old Kings Highway North carried approximately 7,900 vehicles per day west of the I-95 overpass and 4,300 vehicles near the Norwalk City Line in 2011.



Existing traffic operations were observed near the site on Thursday, May 10<sup>th</sup>, 2018. Minimal traffic volume was observed along East Lane. Some delays were present along Old Kings Highway North due to the current reconstruction of the Old Kings Highway North overpass, which currently limits traffic to eastbound only on the overpass.

Collision data was collected from the Connecticut Crash Data Repository for East Lane and Old Kings Highway near the site for the most recent three years. No collisions were reported along East Lane or at the East Lane intersection with Old Kings Highway North during the period analyzed. Three collisions were reported along Old Kings Highway North, with two eastbound rear-end collisions occurring at the Interstate 95 Entrance ramp and one eastbound sideswipe collision occurring at the driveway for 160 Old Kings Highway North located approximately 0.1 miles east of East Lane. No patterns of collisions were identified by the analysis.

### **Proposed Conditions**

The proposed residential development is expected to include 12 efficiency apartment units designed for adults with special needs and/or senior assisted living. The units will be located in two, approximately 4,500 square foot buildings with 6 parking spaces (including 1 handicap space) adjacent to each building. The site will have one driveway at the north end of the East Lane cul-de-sac leading to both parking areas. The residents of the development are expected to be able to enter and exit the site freely via their own vehicles or shared ride vehicles and will be under the care of approximately 4 full time employees.

### **Trip Generation**

To achieve a conservative estimate, site generated traffic was based upon data presented in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10<sup>th</sup> Edition, 2017, the industry standard publication for determining site generated traffic, as well as the expected facility operations plan.

Several ITE Land Use Codes were reviewed to determine which code most accurately represents and conservatively estimates the unique residential use on the site. All Land Use Codes reviewed resulted in less than 5 total entering and exiting peak hour trips based on all available size characteristic independent variables, including Land Use Codes 252 (Senior Adult Housing – Attached), 253 (Congregate Care Facility), 254 (Assisted Living), and 255 (Continuing Care Retirement Community), and 620 (Nursing Home).

To confirm the trip generation estimates based on the industry standard data, the operations plans for residents and employees was also reviewed. As mentioned in the previous section, the residents of the development are expected to be able to enter and exit the site freely via their own vehicles or shared ride vehicles and will be under the care of approximately 4 full time employees. Based on the operation plan, site generated traffic can be conservatively estimated at 16 peak hour trips, assuming that each resident and employee accesses the site in the same peak hour.



## **Intersection Sight Distance**

Intersection sight distance was reviewed at the site driveway in accordance with criteria set forth in the CTDOT Highway Design Manual, 2003 (Including February 2013 Revisions). The site driveway is located at the end of East Lane and therefore only the sight distance to approaching traffic travelling north on East Lane is required. The site driveway has a sight line of 250 feet, extending the length of East Lane to the Old Kings Highway North intersection. The intersection sight distance is considered acceptable as vehicles entering East Lane are expected to be traveling at speeds lower than 20 miles per hour, which would result in a sight distance requirement of 240 feet.

#### Conclusion

It is the professional opinion of Tighe & Bond that the minimal amount of traffic volume generated by the proposed residential development at 26 East Lane will not significantly impact the surrounding roadway network.

Sincerely,

**TIGHE & BOND, INC.** 

Craig Jonnes

Craig D. Yannes, P.E., PTOE

Project Manager

John W. Block, P.E., L.S. Senior Vice President

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